Unique Identification (UID) of Items

17 March 2004

**Contractor Supported Weapon Systems Conference
San Diego CA**

DoD Vision for Item Marking

To implement a policy establishing [a strategic imperative](#) for uniquely identifying tangible items relying to the maximum extent practical on international standards and commercial item markings and while not imposing unique government data requirements.

Uniquely identified (UID) tangible items will facilitate item tracking in DoD business systems and provide reliable and accurate data for management, financial, accountability and asset management purposes.

Joint Requirements Implementation Board

USD (AT&L)

Joint Requirements Implementation Board-UID
Lead: LeAntha Sumpter (Acquisition)
Co-chairs: Trish Vanbelle (Finance)
Alan Estevez (Logistics)
Senior Executive Council Advisor: Brad Berkson

AIT Senior Steering Group

CFO Rules Group

BEA Domain Owners/PM

UID/PC JPMO

Integrated Acquisition Environment

ISO Standards Working Group

DFARS Working Group

Business Rules Integration Group

UID/Systems Engineering Working Group

AIS Technical Interface Working Group

Enterprise Working Group

TBD

Inspection & Acceptance Working Group

UID/RFID Working Group

UID/PBL Working Group

UID/Maintenance Working Group

Grants, OT Working Group

UID/Export Controls Working Group

TBD

TBD

TBD

TBD

JRB WAWF

UID Registry

Key DoD & External UID Stakeholders

DoD Stakeholders

- Office Secretary of Defense
- All Services
- Joint Staff
- Defense Contract Management Agency
- Defense Logistics Information Service
- UK MoD

UID background materials and actions items are available

www.acq.osd.mil/uid

AFMC Community of Practice at
https://afkm.wpafb.af.mil

Industry Stakeholders

- Aerospace Industries Association (AIA)
- Government Electronics Association (GEIA)
- Uniform Code Council (UCC)
- Air Transport Association (ATA)
- Various AIT suppliers
- New York City Transit Authority
- UK Council for Electronic Business

UID Policy Implementation Timeline

Policy
- UID policy issued (implementation effective Jan 2004)   - 29 Jul 03
- RFID policy   - Oct 03
- UID policy revision #1   - 26 Nov 03
- UID policy revision #2   - 22 Dec 03
- (Presumed) UID policy revision #3 - Apr 04
- UID implementation for existing Govt Furnished Equipment/Property   - Jan 05

DFAR Cases
- Public Hearing - May 03
- DFARS Rule published in Federal Register   - 10 Oct 03
- Comments due on DFARS Rule   - 10 Nov 03
- Revised DFARS Rule published in Federal Register   - 30 Dec 03
- Comments due on revised DFARS Rule   -   1 Mar 04
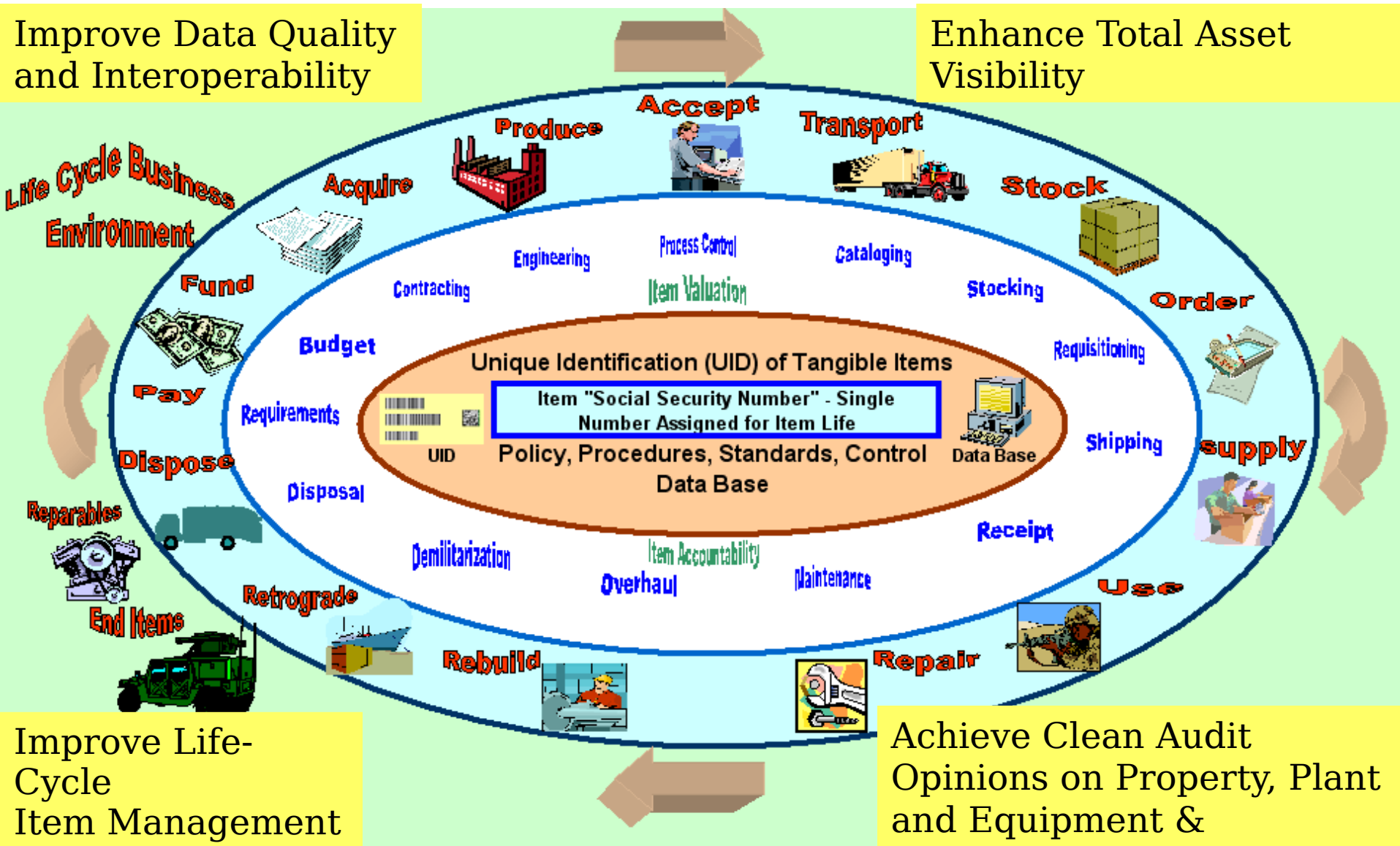
ISO 15434 Change Request
- Finalize "New Work Item Proposal" - Nov 03
- Gather change request support   - ongoing
- ISO 15434 amendment decision   - Jun 05

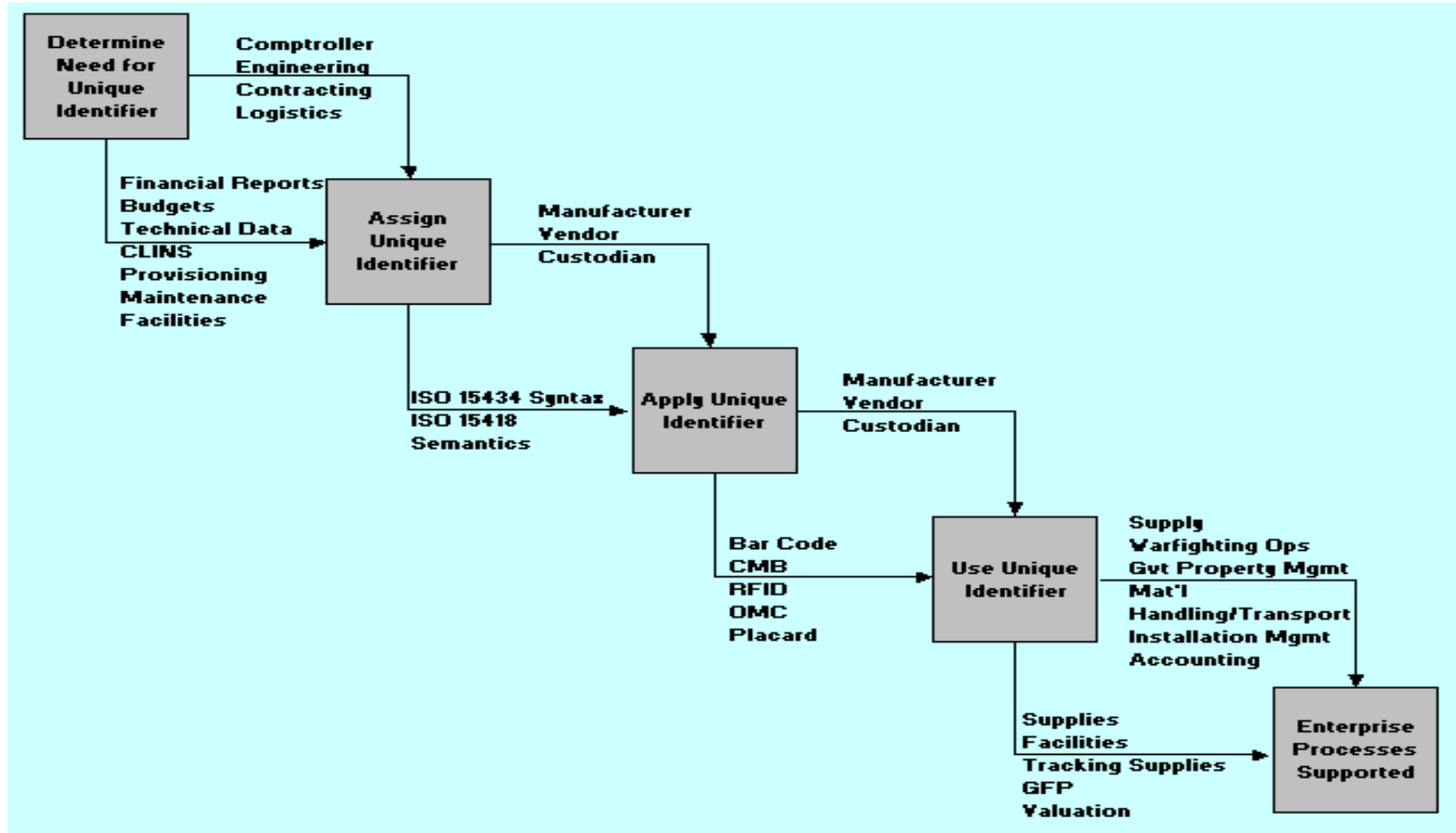## WAWF Modifications
- UID Capability IOC   - Apr 04
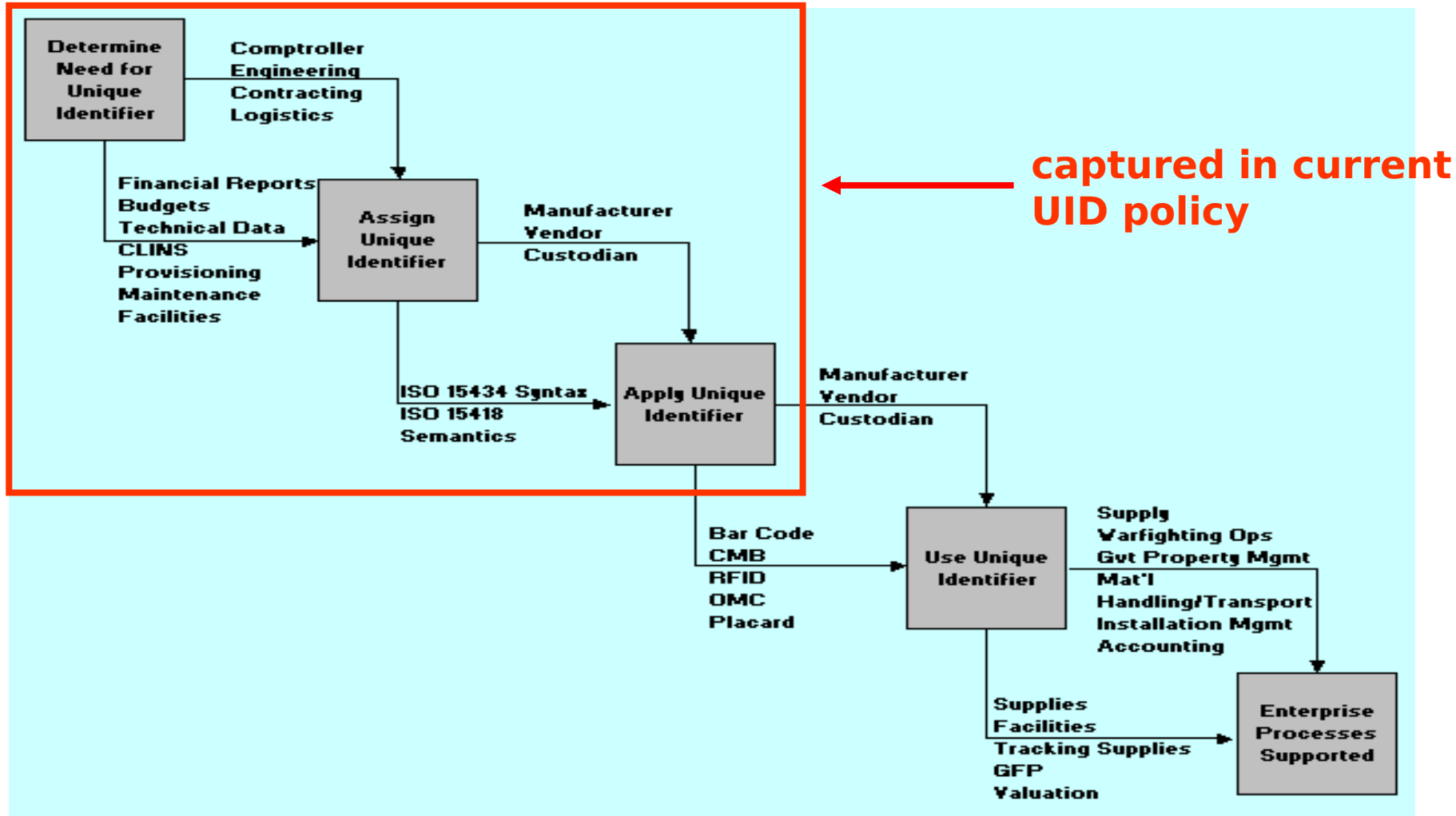
UID Role - Business Enterprise Architecture

Improve Data Quality and Interoperability

Enhance Total Asset Visibility

Life Cycle Business Environment

Accept

Produce

Transport

Acquire

Stock

Fund

Order

Engineering

Process Control

Cataloging

Contracting

Item Valuation

Stocking

Budget

Requisitioning

Pay

Requirements

Unique Identification (UID) of Tangible Items

Item "Social Security Number" - Single Number Assigned for Item Life

Policy, Procedures, Standards, Control Data Base

UID

Data Base

Shipping

supply

Dispose

Disposal

Receipt

Reparables

Demilitarization

Item Accountability

Maintenance

Use

Overhaul

End Items

Retrograde

Rebuild

Repair

Improve Life-Cycle Item Management

Achieve Clean Audit Opinions on Property, Plant and Equipment &

UID Interface Flow

UID Interface Flow

Determine Need for Unique Identifier

Comptroller
Engineering
Contracting
Logistics

Financial Reports
Budgets
Technical Data
CLINS
Provisioning
Maintenance
Facilities

Assign Unique Identifier

Manufacturer
Vendor
Custodian

ISO 15434 Syntax
ISO 15418
Semantics

Apply Unique Identifier

Manufacturer
Vendor
Custodian

Bar Code
CMB
RFID
OMC
Placard

Use Unique Identifier

Supply
Warfighting Ops
Gvt Property Mgmt
Mat'l
Handling/Transport
Installation Mgmt
Accounting

Supplies
Facilities
Tracking Supplies
GFP
Valuation

Enterprise Processes Supported

captured in current UID policy

Requirement for UID

◆ All program managers for new equipment, major modifications, and reprocurements of equipment and spares shall plan to apply Unique Identification (UID) on tangible items

◆ UID is a mandatory DoD requirement for all solicitations issued on or after January 1, 2004

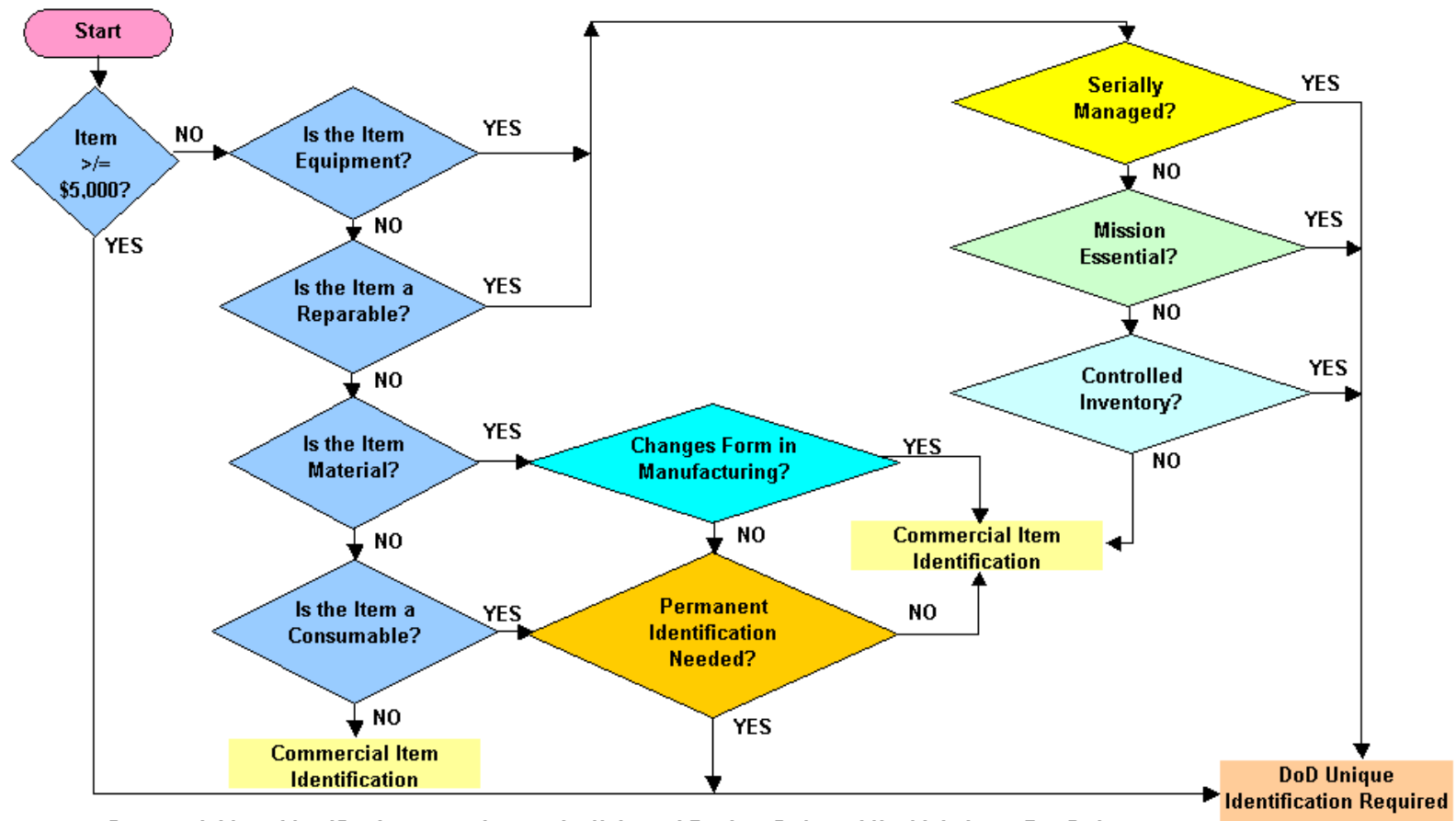◆ Specific guidance related to UID requirements can be found by referring to the following sources:

  – DFARS interim rules issued 10 Oct 03 & 22 Dec 03

  – DoD Guide to UID

  – Coordinated Policy Guidance

  – www.acq.osd.mil/uid

V. 1.3 is out;
V. 1.4 is underway

What Requires UID?

Which Items Require a Unique Identifier

Commercial item identification examples are the Universal Product Code and Health Industry Bar Code

Unique **ID**entification **(UID)** is....

UID is . . .

. . . the set of data for tangible assets that is globally unique and unambiguous, ensures data integrity and data quality throughout life, and supports multi-faceted ~~~~nd

EID	370521
Original Part Number	1234
Serial Number	786950

EID - Enterprise Identifier

UID NR = D3705211234786950

Create and Generate the UID

The components that make up the UID are identified in the table below. Each enterprise has two options for creating the UID.

	UID Construct #1	UID Construct #2
Based on current enterprise configurations	If items are serialized within the Enterprise	If items are serialized within Part Number
UID is derived by concatenating the data elements IN ORDER:	Issuing Agency Code* Enterprise ID Serial Number	Issuing Agency Code* Enterprise ID Original Part Number Serial Number
Data Identified on Assets Not Part of the UID (Separate Identifier)	Current Part Number	Current Part Number

*The Issuing Agency Code (IAC) represents the registration authority that issued the enterprise identifier (e.g., Dun and Bradstreet, EAN.UCC). The IAC can be derived from the data qualifier for the enterprise

UID Registry – Inquiry screen

UID Reporting in the Supply Chain

Product Data	Supply Chain	Unique Items	UID **

Enterprise

Prime — PN 200H0028

End Item Specs

Item Markings

EI 194532636
PN 200H0028
SN 003896*

UN194532636200H0028003896

Delivery to Govt
End Item

List of Hardware UIDs
(Optional)

Tier 1 — PN 210H0611

Subassembly Specs

Item Markings

EI 040535536
PN 210H0611
SN 006392*

UN040535536210H0611006392

Delivery to Govt
Spares

List of Hardware UIDs
(Optional)

Tier 2 — PN 216H1439

Component Specs

Item Markings

EI 080907280
PN 216H1439
SN 020890*

UN080907280216H1439020890

Delivery to Govt
Spares

List of Hardware UIDs
(Optional)

Tier 3 — PN 218H2861

Part Specs

Item Markings

EI 083949107
PN 218H2861
SN 105742*

UN083949107218H2861105742

Delivery to Govt
Spares

**UN = Issuing Agency Code for DUNS

* Serialized within the part number using DUNS

UID = Unique Identifier; EI = Enterprise Identifier
PN = Part Number; SN = Serial Number

UID Valuation in the Supply Chain
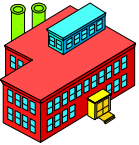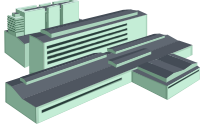
Supply Chain	Items Qualifying for UID	UID ** Deliverables
	Item Markings EI 194532636 PN 200H0028 SN 003896*	**Delivery to Gov't** End Item	**UN1945326362 00H0028003896** CLIN Valuation for end item
	Item Markings EI 040535536 PN 210H0611 SN 006392*	**Delivery to Gov't** Spares	**UN0405355362 10H0611006392** CLIN Valuation - _if_ delivered as separate end item
	Item Markings EI 080907280 PN 216H1439 SN 020890*	**Delivery to Gov't** Spares	**UN0809072802 16H1439020890** CLIN Valuation - _if_ delivered as separate end item
	Item Markings EI 083949107 PN 218H2861 SN 105742*	**Delivery to Gov't** Spares	**UN0839491072 18H2861105742** CLIN Valuation - _if_ delivered as separate end item

UID = Unique Identifier; EI = Enterprise Identifier
PN = Part Number; SN = Serial Number

*Serialized within the part number using DUNS

**UN = Issuing Agency Code for DUNS

UID Vendor Perspective


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Contract Award → Determine what items need to be marked → Determine mark method and location → Create MBOM and MPP → Make Item → Functional Inspect

Buy Item → Subcontract SOW with UID Requirements → Receive Inspect & Store → Retrieve from Stock → Record UID, Integrate into end Product

Mark Item, Capture UID(s) → Record UID Data Delivery Requirements → Final Inspection → Ship, DD250
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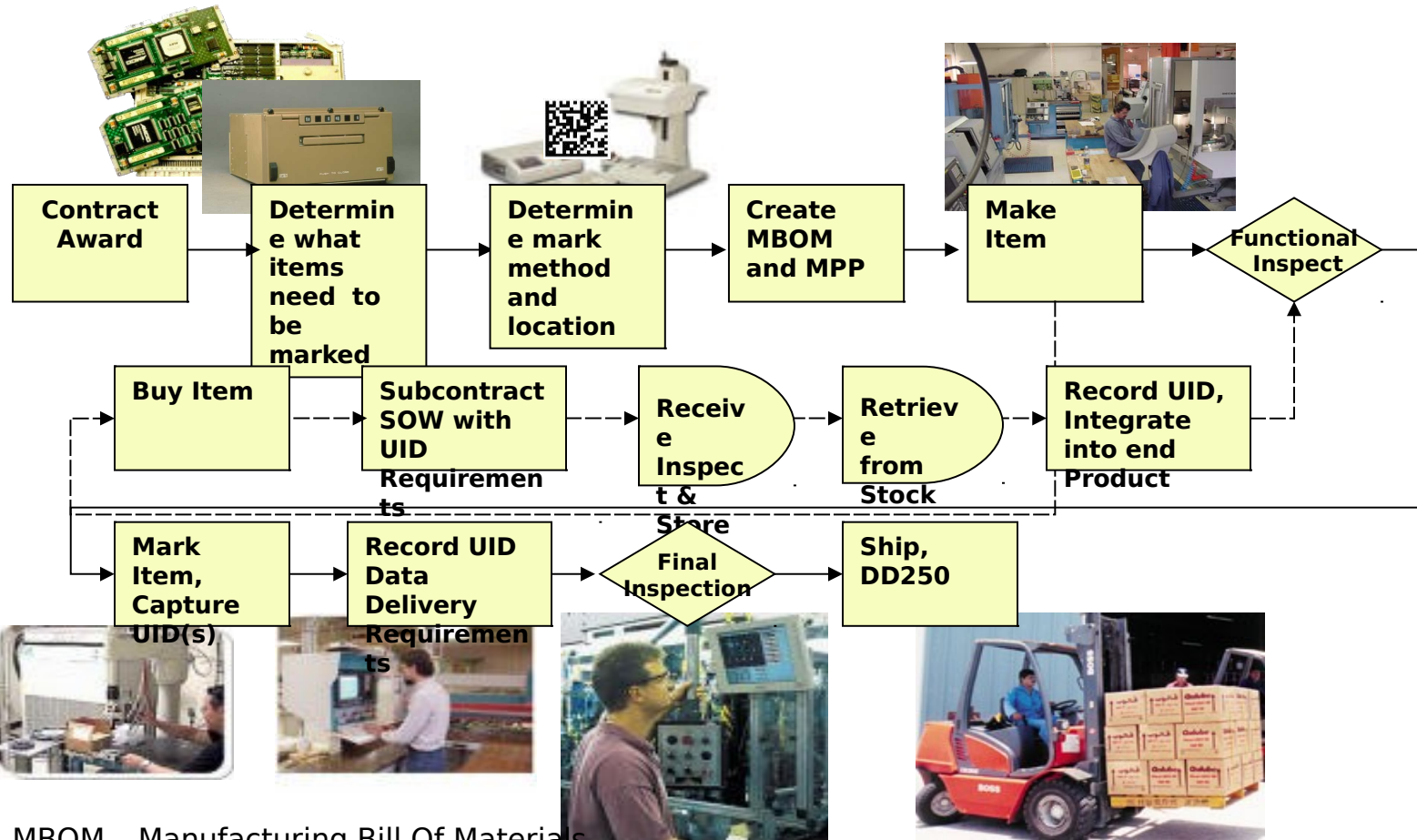
MBOM – Manufacturing Bill Of Materials
MPP – Manufacturing Process Planning

UID Contracting Effects

- New subject for all acquisition personnel
- Potential CLIN/SubCLIN Issue (DFARS 204.7104)
- New solicitation provision and contract clause (DFARS 252.211-7003, 1 Jan 04)
- Delayed impact on existing GFP 1 Jan 05)
- New data collection and payment system (Wide Area Work Flow, mandatory on 1 Jan 05)

Current UID Activity

- ◆ Two interim rules published (10 Oct 03 and 26 Nov 03)
  - – Public comment on second interim rule closed 1 Mar 04
  - – Expect further interim guidance before any final rule is issued
- ◆ OSD guidance continues to emerge
  - – OSD Information Paper on UID & Contracting (PDF file) - under review for possible recall
  - – Early draft of business case for policy changes to FAR Part 45
- ◆ Expect further policy guidance to emerge as DoD working groups continue to work issues
  - – OSD working with ATA and ISO towards collaborative solution
  - – OSD program office has shown honest interest in what we think

Some UID Issues

- ◆ AF/ILI tasking to assess UID impact on depot-manufactured items
  - – Estimated 2023 parts manufactured in FY03 that > $5K threshold
  - – 776 unique part numbers
  - – Cost of UID not yet programmed into depot rates
- ◆ Overall, cost of UID is still an unknown
  - – Cost of changing drawings, tech orders, work specifications
  - – Costs to develop data system interfaces for end item tracking
  - – Material support costs associated with shipping, storage, disposal
- ◆ Implementation on repair contracts still unclear
- ◆ UID implementation plan requirement
  - – Initial plan to cover depot-manufactured items
  - – OSD (Mr. Wynne) looking for plan during program reviews
  - – OSD supposed to provide template in mid-March

UID Outcomes "Down the Road"

- ◆ Comprehensive, timely data about each uniquely identified item throughout the supply chain
  - – Generation, collection and analysis of maintenance data
  - – End-to-end tracking and traceability of unique items
  - – Reliability and maintainability information on each item throughout its life cycle
- ◆ Improved supply chain efficiency
  - – Administrative cost reduction
  - – Reduced stock levels
  - – Simplicity, standardization, speed and certainty in automated data capture and electronic information exchange
- ◆ Integrated transportation and movement of individually identified items
- ◆ Leveraged commercial technologies and practices

AFMC UID Points of Contact

Direct questions to:

Mark S. Reboulet

AFMC LSO/LOA

(937) 257-7181

DSN 787-7181

Mark.Reboulet@wpafb.af.mil

Michael.Wagner@wpafb.af.mil

Michael R. Wagner

AFMC/DR-ACE

(937) 257-6076

DSN 787-6076